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10/501,399	12/23/2004	Koji Okomori	47172	2492

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EXAMINER

BAREFORD, KATHERINE A

ART UNIT PAPER NUMBER

1762

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/501,399

Applicant(s)

OKOMORI ET AL.

Examiner

Katherine A. Bareford

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

*Claim 1 is canceled*

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The amendment of Feb. 15, 2006 has been received and entered. With the amendment, claim 1 is canceled and claims 2-12 are now pending for examination.

#### ***Specification***

1. The objection to the abstract of the disclosure is withdrawn due to the filing of an abstract in the form of a single paragraph on Feb. 15, 2006.

#### ***Claim Objections***

2. Claims 3-4 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

As worded, after the amendment of Feb. 15, 2005, it is still unclear how claims 3 and 4 further limit the parent claim as no process limitation is provided to limit the parent claim. While reference to the paper being for offset (claim 3) and gravure (claim 4) printing is made, no positive recitation of performing such printing is made and no change to the method of producing the coated paper is required.

*Claims*

3. As to the use of "a film transfer method" in the claims, the Examiner understands this to require a roll coating method as described at page 1 of the specification. If applicant disagrees, he should so state on the record.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 2-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Wurster et al (US 6197155).

Claim 2: Wurster teaches a method for producing coated paper for printing. Column 1, lines 3-5. A coating color containing a pigment and an adhesive (binder) is applied to a base paper. Column 2, lines 50-65 and column 3, lines 5-15. The coating color contains, for example, 1 wt % polyvinyl alcohol (PVA) in relation to coating pigment (1 part by weight PVA to 100 parts by weight of the pigment). Column 2, lines 60-65 and column 6, lines 43-45. The coating color application method can be film transfer methods such as the Massey coater or a metering size press. Column 4, lines 20-30. The coating weight can be 7 g/m<sup>2</sup>. column 4, lines 40-45.

Claim 3: the coated paper is for offset printing. Column 1, lines 3-5.

Claim 4: while the use of the paper for gravure printing is not mentioned, the paper is capable of such use to the extent claimed, because all of the coating features of claim 2 are provided.

Claim 5: Wurster teaches a process as described in claim 2. The coated paper is for offset printing. Column 1, lines 3-5. The polyvinyl alcohol can be in addition to other adhesive, and thus serves as an auxiliary to the extent claimed. Column 2, lines 55-68 and column 3, lines 20-40. The amount of starch present can be 0 percent, thus providing less than 2.0 parts by weight of starch as an adhesive. Column 3, lines 30-40.

Claim 6: the coating color can be 18 weight percent adhesive (binder) in relation to coating pigment (18 parts by weight of adhesive based on 100 parts by weight of the pigment) or less. Column 3, lines 10-25.

Claim 7: the coating color can be 20 g/ m<sup>2</sup> total weight, on both sides, with the coating mass spread roughly uniformly on both coat applications, thus providing roughly 10 g/ m<sup>2</sup> on each side of the base paper, which is more than 7 g/ m<sup>2</sup> on each side. Column 4, lines 45-55.

Claim 8: the coating color can be applied by a transfer roll coater method (the Massey coater process is inherently a transfer roll coater method). Column 4, lines 20-30.

Claim 9: a coated paper for printing is produced by the method according to claim 5. column 1, lines 3-5.

Claims 10 and 11: the coating color can be 18 weight percent adhesive (binder) in relation to coating pigment (18 parts by weight of adhesive based on 100 parts by weight of the pigment). Column 3, lines 10-25.

Claim 12: the coating color can be 65 weight percent solids, for example. Column 4, lines 20-25.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-3 and 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saji et al (US 5030325) in view of Hershey et al (US 4154899).

Saji teaches a method of producing coated paper for printing. Column 2, lines 15-30 and column 1, lines 10-20. A coating color containing a pigment and an adhesive is applied on a base paper. Column 2, lines 15-30. The coating color can contain polyvinyl alcohol and starch as adhesives. Column 4, lines 10-30. The adhesive can be 5-50 wt parts per 100 wt parts pigment, preferably 10-30 wt parts adhesive per 100 wt parts pigment. Column 4, lines 25-35. The applied coating weight can be 50 g/m<sup>2</sup>. Column 4, lines 60-65. The coating can be applied to the paper by various methods,

such as blade coating, a roll coater, a reverse roll coater, a gravure coater, a size press coater etc. Column 4, lines 40-48. A coated paper is provided for printing. Column 2, lines 15-30 and column 1, lines 10-20. The coating color can be 40-75 wt% solids. Column 4, lines 45-55.

Saji teaches all the features of these claims except (1) the precise amounts of polyvinyl alcohol (claim 2), (2) the offset printing (claim 3, 5), (3) the amount of starch (claim 5), (4) the transfer roll coater method (claim 8).

Hershey teaches a method for producing coated paper for printing. Column 2, lines 15-30. A coating color containing a pigment and an adhesive is applied on a base paper. Column 2, lines 30-40. The coating color can contain 5-30 parts adhesive per 100 parts pigment. Column 5, lines 10-15. The coating color can contain 1.5 parts by weight of polyvinyl alcohol per 100 parts by weight of the pigment as part of the overall weight of adhesives. Column 12, lines 5-10 and 30-55 (Example 8). The PVA would be an auxiliary to other adhesives provided, as it is not the sole adhesive. Column 12, lines 30-55. The applied coating weight can be 12 lbs/ream ( $> 7 \text{ g/m}^2$ ) (for example 10 lbs/ream is approx.  $14.6 \text{ g/m}^2$ ). Column 3, lines 10-15. Hershey teaches to apply the coating by blade coating. Column 2, lines 15-25. The paper can be for offset printing. Column 2, lines 25-30. The coating can also be 1.5 parts by weight of starch as an adhesive per 100 parts by weight of the pigment. Column 12, lines 5-10 and 30-55 (Example 8). The amount of adhesive can be less than 18 parts by weight per 100 parts

by weight of the pigment (note Example 8, which has 15 parts by weight). Column 12, lines 5-10 and 30-55 (Example 8). A coated paper is produced. Column 2, lines 15-30.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Saji to use the paper for offset printing and to use the starch and polyvinyl alcohol amounts suggested by Hershey in order to provide a desirable paper for a process such as offset printing, because Saji teaches that a desirable paper for printing is coated with pigments and adhesives that can include starch and polyvinyl alcohol, and Hershey teaches that desirable papers for printing made by coating with pigments and adhesives can be used in offset printing and that desirable amounts of starch and polyvinyl alcohol are 1.5 wt parts per 100 weight parts of pigment for each. It further would have been obvious to modify Saji in view of Hershey to use a transfer roll coater as the film transfer method with an expectation of achieving a desirable coating, as Saji teaches that a variety of roll coating (film transfer) methods can be used, and it is the Examiner's position that transfer roll coating is a well known method of roll coating.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saji in view of Hershey as applied to claims 2-3 and 5-12 above, and further in view of Lee et al (US 4258104).

Saji in view of Hershey teaches all the features of this claim except the use of the paper for gravure printing.



However, Lee teaches that when coating a paper with adhesive and pigment for printing purposes, a desirable printing process to be provided on the paper is a rotogravure (a type of gravure) printing. Column 1, lines 1-25, column 11, lines 5-20 and column 13, lines 30-36.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Saji in view of Hershey to provide that the paper is printed with a gravure printing process as suggested by Lee in order to provide a desirable printed paper, because Saji in view of Hershey teaches to provide a pigment/adhesive coated paper for a printing process, and Lee teaches that when providing a pigment/adhesive coated paper for a printing process, a desirable printing process to be used is a rotogravure process.

9. Braaten, et al "Changing Sheet Characteristics Drive Move to Film Coating", Pulp & Paper Magazine, May 1, 1996, indicates the definition of a Massey Coater as a transfer roll coating system. Clancy et al (US 3157533) also indicates the definition of a Massey Coater as a transfer roll coating system (column 13, lines 5-15).

#### *Response to Arguments*

10. Applicant's arguments filed Feb. 15, 2006 have been fully considered but they are not persuasive.

The Examiner notes the new 35 USC 102(b) rejection provided using Wurster et al (US 6197155) as discussed above.

As to the arguments provided as to the combination of Saji in view of Hershey, the Examiner has reviewed these arguments, and remains of the position that Saji in view of Hershey provides the features of the invention as claimed. As to the argument that while Saji provides PVA as a conventional adhesive, it does not provide it as an addition to improve transferability to enable a coating weight of 7 g/m<sup>2</sup> or more, and that Hershey, while indicating that the coating can contain 1.5 parts by weight PVA, teaches blade coating and does not suggest the claimed film transfer method, the Examiner disagrees. Saji provides that for paper coating for printing using adhesives/pigment, the adhesives can include PVA and other materials and that blade or roll coating methods can be used (column 4, lines 10-30 and 40-50). Hershey provides that for paper coating for printing using adhesives/pigment the adhesives can include PVA and other materials and the amount of PVA can be 1.5 parts by weight and that the coating method is blade coating. It would have been obvious to one of ordinary skill in the art to use the adhesive amounts, including the PVA of 1.5 parts by weight, of Hershey when performing the coating process of Saji with an expectation of desirable coating results, because Saji teaches adhesive materials overlapping with Hershey and coating methods overlapping with Hershey, and Hershey teaches specific amounts of the adhesive materials that provide a desirable coating. Saji provides that blade coating and roll coating are both desirable methods to use with the adhesive/pigment coatings.

Saji and Hershey both provide that the claimed coating weight can be achieved. As to the argument as to the improved transferability, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). As to the dependent claims, all of the features of these dependent claims are provided by the combination of the references as discussed above.

As to the rejection of claim 4 further using Lee, applicant has argued that Lee does not cure the defects of the combination of Saji and Hershey. As the rejection using Saji and Hershey is maintained, the rejection of claim 4 further using Lee is also maintained by the Examiner.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine A. Bareford whose telephone number is (571) 272-1413. The examiner can normally be reached on M-F(6:00-3:30) with the First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Other inquiries can be directed to the Tech Center 1700 telephone number at (571) 272-1700.

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Furthermore, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
KATHERINE BAREFORD  
PRIMARY EXAMINER